Claims

1. A method for predicting the responsiveness of a patient to beta-blocker medications comprising genotyping the $\beta_1$ adrenergic receptor ($\beta_1$AR) of said individual at codon 49, wherein the presence of the Ser49 phenotype is indicative of a likely response to said beta-blocker medication.

2. The method according to claim 1, further comprising the genotyping of said individual at codon 389, wherein the presence of the Arg389 phenotype is indicative of a likely response to said beta-blocker medication.

3. The method according to claim 1, wherein said beta blocker medications are selected from the group consisting of acebutolol, atenolol, betaxolol, bisoprolol, esmolol, metoprolol, long-acting metoprolol, carteolol, nadolol, penbutolol, pindolol, propranolol, long-acting propranolol, sotalol, timolol, labetalol, salts thereof, and combinations thereof.

4. A method for predicting the responsiveness of a patient to beta-blocker medications comprising genotyping the $\beta_1$ adrenergic receptor ($\beta_1$AR) of said individual at codon 389, wherein the presence of the Arg389 phenotype is indicative of a likely response to said beta-blocker medication.

5. The method according to claim 4, further comprising the genotyping of said individual at codon 49, wherein the presence of the Ser49 phenotype is indicative of a likely response to said beta-blocker medication.

6. The method according to claim 4, wherein said beta blocker medication is selected from the group consisting of acebutolol, atenolol, betaxolol, bisoprolol, esmolol, metoprolol, long-acting metoprolol, carteolol, nadolol, penbutolol, pindolol, propranolol, long-acting propranolol, sotalol, timolol, labetalol, salts thereof, and combinations thereof.

7. A method of reducing delays in blood pressure control in an individual comprising:

a) genotyping:

1) the $\beta_1$ adrenergic receptor ($\beta_1$AR) of said individual at codon 49, wherein the presence of the Ser49 phenotype is indicative of a likely response to said beta-blocker medication;

2) the $\beta_1$ adrenergic receptor ($\beta_1$AR) of said individual at codon 389, wherein the presence of the Arg389 phenotype is indicative of a likely response to said beta-blocker medication; or

3) the $\beta_1$ adrenergic receptor ($\beta_1$AR) ) of said individual at codons 49 and 389, wherein the presence of the Ser49 and Arg389 phenotype is indicative of a likely response to said beta-blocker medication; and

b) providing, on the basis of the observed phenotype, an appropriate anti-hypertensive agent, wherein beta blocker medications are prescribed to an individual having a Ser49 phenotype, Arg389 phenotype, or a Ser49/Arg389 phenotype and wherein patients lacking a Ser49 phenotype, Arg389 phenotype, or a Ser49 and Arg389 phenotype are prescribed alternative non-beta blocker antihypertensive medications.

8. The method according to claim 7, wherein said beta blocker medication is selected from the group consisting of acebutolol, atenolol, betaxolol, bisoprolol, esmolol, metoprolol, long-acting metoprolol, carteolol, nadolol, penbutolol, pindolol, propranolol, long-acting propranolol, sotalol, timolol, labetalol, salts thereof, and combinations thereof.